Journal of Fluid Mechanics Volume 500 **10 February 2004**

A. G. Roy, T. Buffin-Bélanger, H. Lamarre & A. D. Kirkbride	Size, shape and dynamics of large-scale turbulent flow structures in a gravel-bed river	1
Z. Yu & N. Phan-Thien	Three-dimensional roll-up of a viscoelastic mixing layer	29
X. B. Nie, S. Y. Chen, W. N. E & M. O. Robbins	A continuum and molecular dynamics hybrid method for micro- and nano-fluid flow	55
S. Beji & K. Nadaoka	Solution of Rayleigh's instability equation for arbitrary wind profiles	65
E. R. Damiano, D. S. Long, F. H El-Khatib & T. M. Stace	On the motion of a sphere in a Stokes flow parallel to a Brinkman half-space	75
P. J. Schmid & M. Rossi	Three-dimensional stability of a Burgers vortex	103
H. H. Saber & M. S. El-Genk	On the breakup of a thin liquid film subject to interfacial shear	113
J. C. del Álamo, J. Jiménez, P. Zandonade & R. D. Moser	Scaling of the energy spectra of turbulent channels	135
M. A. Peter & M. H. Meylan	Infinite-depth interaction theory for arbitrary floating bodies applied to wave forcing of ice floes	145
A. G. Walton	Stability of circular Poiseuille–Couette flow to axisymmetric disturbances	169
A. Broc, S. De Benedictis, G. Dilecce, M. Vigliotti, R. G. Sharafutdinov & P. A. Skovorodko	Experimental and numerical investigation of an O_2/NO supersonic free jet expansion	211
D. Fabre & L. Jacquin	Viscous instabilities in trailing vortices at large swirl numbers	239
J. Otero, L. A. Dontcheva, H. Johnston, R. A. Worthing, A. Kurganov, G. Petrova & C. R. Doering	High-Rayleigh-number convection in a fluid-saturated porous layer	263
Q. Xu	Nearly symmetric and nearly baroclinic instabilities in the presence of diffusivity. Part 2. Mode structures and energetics	283
N. A. Pelekasis, A. Gaki, A. Doinikov & J. A. Tsamopoulos	Secondary Bjerknes forces between two bubbles and the phenomenon of acoustic streamers	313
INDEX TO VOLUME 500		348
SCHEDULE OF INTERNATIONAL CONFERENCES ON FLUID MECHANICS		350

CAMBRIDGE UNIVERSITY PRESS

Cambridge Journals Online
journals.cambridge.org

0022-1120(200402)500;1-I